

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: July 18, 2001, 15:53:41 ; Search time 22.87 Seconds
(without alignments)
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Title: us-09-587-111-5
Perfect score: 4004
Sequence: 1 MTPSSSPVFRLETLDGGQE..... EDEDGASEEENYVPVQLQSN 764

Searched:

total number of hits satisfying chosen parameters: 412676
Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
listing first 45 summaries

Database : A_Geneseq_0501:*

1: /SIDS8/gcadata/geneseq/geneseq/AA1980.DAT: *
2: /SIDS8/gcadata/geneseq/geneseq/AA1981.DAT: *
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13: /SIDS8/gcadata/geneseq/geneseq/AA1993.DAT: *
14: /SIDS8/gcadata/geneseq/geneseq/AA1994.DAT: *
15: /SIDS8/gcadata/geneseq/geneseq/AA1995.DAT: *
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19: /SIDS8/gcadata/geneseq/geneseq/AA1999.DAT: *
20: /SIDS8/gcadata/geneseq/geneseq/AA2000.DAT: *
21: /SIDS8/gcadata/geneseq/geneseq/AA2001.DAT: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match Length	DB ID	Description
1	4004	100.0	764	20	AYV29469 Human vanilloid receptor homologue; VANILRP2; polymorphic variant; PVP-1; therapy; diagnosis; chronic pain; neuropathic; postoperative; rheumatoid arthritis; neuralgia; algnesia; nerve injury; ischaemia; neurodegeneration; stroke; incontinence; inflammatory disorder.
2	4004	100.0	764	20	AYV06559 Human vanilloid receptor VR-2 protein
3	4004	100.0	764	21	AYV97358 Human vanilloid receptor VR-2 (altern
4	4004	100.0	764	22	AB235622 Rat vanilloid receptor VR-2 (VR2) c
5	3988.5	99.6	763	20	AYV242308 Human vanilloid receptor VR-2
6	3988.5	99.6	763	20	AYV29471 Human vanilloid receptor VR-2
7	3939	98.4	764	21	AYV84834 Amino acid sequence of rat vanilloid receptor VR-2
8	3258	81.4	630	21	AYV77364 Human vanilloid receptor VR-2
9	3051.5	76.2	761	20	AYV06556 DRPPI; 1999-479049/40.
10	3051.5	76.2	761	20	AYV09790 N-PSDB; AAZ07014.
11	3036.5	75.8	727	20	AAW09798 Human VRRP-1 (VR2)
12	3036.5	75.8	727	20	AAW09798 Human VR-2 (altern
13	2240	55.9	436	21	AAV97359 Rat partial VR-2 p
14	2230	55.9	554	21	AAV97360 Chicken capsaicin receptor VR-1
15	1689	42.2	843	20	AAV06561 Rat capsaicin receptor VR-1
16	1689	42.2	843	20	AAV06559 Human capsaicin receptor VR-1
17	1652	41.3	838	20	AAW09789 Human vanilloid receptor VR-1
18	1652	41.3	838	21	AAV97357 Human VR-1 protein
19	1651.5	41.2	839	21	AAV96478 Human vanilloid receptor VR-1
20	1648.5	41.1	839	20	AAV06558 Human vanilloid receptor VR-1
21	1644.5	41.1	839	20	AAV06558 Human vanilloid receptor VR-1
22	1644.5	41.1	839	21	AAV06558 Human vanilloid receptor VR-1
23	1644.5	41.1	839	20	AAV06558 Human vanilloid receptor VR-1
24	1640.5	41.0	839	20	AAV06558 Human vanilloid receptor VR-1
25	1638.5	40.9	839	20	AAV06558 Human vanilloid receptor VR-1
26	1638.5	40.9	839	21	AAV06558 Human vanilloid receptor VR-1
27	1640	36.0	279	19	AAW4908 Human vanilloid receptor VR-1
28	1644.5	23.9	217	20	AAV06558 Human vanilloid receptor VR-1
29	1637	15.9	725	22	AAU00412 Human vanilloid receptor VR-1
30	1635	15.9	732	22	AAU00413 Human vanilloid receptor VR-1
31	1634	15.8	725	22	AAU00413 Human vanilloid receptor VR-1
32	1634	15.8	727	22	AAB31595 Human vanilloid receptor VR-1
33	162.5	12.1	451	22	AAU00414 Human vanilloid receptor VR-1
34	162.5	12.1	57	20	AAW09793 Human vanilloid receptor VR-1
35	16.8	6.8	232	19	AAW09792 Human vanilloid receptor VR-1
36	24.7	6.2	71	20	AAW09792 Human vanilloid receptor VR-1
37	224.5	5.6	974	19	AAW09560 Human transients receptor
38	1095	3.6	1095	20	AAV00931 Prostate-tumour marker
39	144.5	3.6	1104	21	AAV5437 Human calcium channel
40	140.5	3.5	1791	22	AAB20121 Human sodium channel
41	14.0	3.5	1214	16	ABR0097 Black widow spider
42	138.5	3.5	352	21	ABR1616 D. immitis ankyrin
43	138.5	3.5	1745	19	AAW0608 Full-length ankyrin
44	138.5	3.5	1745	19	AAW0608 D. immitis ankyrin
45	138.5	3.5	1745	21	ABR11589 D. immitis ankyrin

ALIGNMENTS

RESULT 1
ID AAY29469 standard; Protein; 764 AA.

XX AAY29469;

DT 08-OCT-1999 (first entry)

XX Human vanilloid receptor homologue VANILRP2.

XX Human vanilloid receptor homologue VANILRP2; polymorphic variant; PVP-1; therapy; diagnosis; chronic pain; neuropathic; postoperative; rheumatoid arthritis; neuralgia; algnesia; nerve injury; ischaemia; neurodegeneration; stroke; incontinence; inflammatory disorder.

OS Homo sapiens.

XX WO9937765-A1.

PN XX

PD 29-JUL-1999.

XX PF 25-JAN-1999; 99M0-EP0420.

XX PR 20-JAN-1999; 99GB-0001209.

PR 27-JAN-1998; 98ED-0300549.

PR 26-OCT-1998; 98GB-0023421.

XX (SMIK) SMITHKLINE BEECHAM PLC.

XX Davis, Duckworth DM, Hayes PD;

XX DR WPT; 1999-479049/40.

DR N-FSDB; AAZ07014.

PT New human vanilloid receptor homologues (VANILREP2)

XX

PS

Claim 4; Page 30-32; 47pp; English.

XX

CC

The present sequence represents a human vanilloid receptor homologue, designated VANILREP2. VANILREP2 can be used to diagnose disease or susceptibility to disease related to expression or activity of VANILREP2 polypeptides. VANILREP2 may be used to treat diseases including pain, (for example chronic, neuropathic, postoperative, rheumatoid arthritic), neuralgia, algesia, nerve injury, ischaemia, neurodegeneration, stroke, incontinence, and inflammatory disorders.

CC

CC

CC

CC

XX

Sequence 764 AA;

Query Match 100.0%; Score 4004; DB 20; Length 764;

Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

Matches 764; Conservative 0;

XX

Db

1

MTPSSSPVFRLETLDDGGEDGSEADRKGKLDFFGLPMPMESQFOGEDDRKFAPQIRVNLY 60

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1

mtpssspvfrlelqqgqdgsgedeadrgkldfsgqlppmesqfqgedrkfapqirvnly 60

|||||||

QY

61

RKGIGASQDPNRRDRDRFLNAVSRGVPEDLAGIPEYLSKTSKYLTDSEYTGSTGKTC 120

|||||||

Db

61

rkgigasqdpnrrdrdrflnaavsrgvpedlagipeylsktskyltdseytgstgktc 120

|||||||

QY

121

MKAVLNLDGWNACITPLQLQIDRSGNPROPLVNAQCTDYYRHSALHIAEKSLOCV 180

|||||||

Db

121

mkavlnkdgvnacilplqlqdsgnpgpvnhaqtddyyrghsalhiaeikslocv 180

|||||||

QY

181

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|||||||

Db

181

livenganyharacgrgffqkggtccfyqelpislaactkqwdvsvylenphqasila 240

|||||||

QY

241

TDSQNTVLUHALWISDNAAENALVTSMDGLQAGARLCPQTQLEDTRNLQDTPKL 300

|||||||

Db

241

tdsqntvluhalwisdnsaenaltvsmydglqagarlcpqvdledrnqdltpkl 300

|||||||

QY

301

AAKEGKIEFRHIQREFGGLSHRSRKTEWCYGPPVRLSYLDAVSDCEENSLTIAF 360

|||||||

Db

301

aaakeggkiefrhiqrefgslshirkfewcgvprvslsyldasvdseensvleiaf 360

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QY

361

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Db

361

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QY

421

PHIKAEVGNSMLLTGHILLGGYLWQOLWFWRRHFIWISFIDSYEFEILFLQALL 480

|||||||

Db

421

phiakaevgnmltghillggylwqqlwyfrhrfiwifdsyfeiflfqall 480

|||||||

QY

481

TVVSQVLCFLAIEWYPLIVSALVGLWNLYYTRGFQHTGIVSWMOKVILRDLRFLL 540

|||||||

Db

481

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|||||||

QY

541

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|||||||

Db

541

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|||||||

QY

601

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Db

601

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QY

661

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Db

661

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QY

721

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Db

721

lcedpsgagvprtlenpviaspkdedgaseenvypvqlqn 764

|||||||

AY06559

ID AY06559 standard; Protein; 764 AA.

XX

AC AY06559;

XX

DT 08-OCT-1999 (first entry)

XX

DE Human vanilloid receptor-related polypeptide 1 (VRERP-1).

XX

KW vanilloid receptor-related polypeptide 1; VRER-1; VR2;

XX

KW capsaicin receptor; VRI; human; vanilloid; analgesic; pain;

XX

KW inflammation; therapy; diagnosis.

XX

OS Homo sapiens.

XX

PN W09337675-A1.

XX

PD 29-JUL-1999.

XX

PR 22-JAN-1999; 99WO-US01418.

XX

PA (REGC) UNIV CALIFORNIA.

XX

PI Brake AJ, Caterina M, Julius DJ;

XX

DR WPI: 1999-469113/39.

XX

N-PSDB; AAX87492.

XX

PT New isolated capsaicin receptor polypeptide and related nucleic acid

PT - useful for detecting vanilloid compounds, identifying modulators,

PT and in diagnosis or treatment of e.g. pain and inflammation

XX

Claim 4; Page 110-112; 120pp; English.

XX

CC The present sequence represents a human vanilloid receptor-related

CC polypeptide 1 (VRRP-1 or VR2), as deduced from a cDNA clone (see

CC AAX87492) isolated from human CCRP-CEM cells.

CC VRRP-1 is an

CC example of a capsaicin receptor-related polypeptide of the

CC invention. It is not activated by capsaicin or heat, but may

CC interact with the novel capsaicin receptor VRI (see AY06558).

CC The invention provides vanilloid receptor polypeptides and

CC poly nucleotides, including capsaicin receptor-related

CC and poly nucleotides, as well as expression vectors, host cells and

CC transgenic animals. It also provides a method of using such

CC receptors to identify vanilloid compounds in natural products or

CC to screen candidate compounds that modulate capsaicin receptor

CC function for use as analgesics (vanilloid analogues, therapeutic

CC antibodies, antisense oligonucleotides, capsaicin receptor-encoding

CC poly nucleotides for gene therapy), flavour-enhancing agents, etc.

CC Capsaicin receptor-related polypeptides and specific antibodies can

CC also be used for the diagnosis and treatment of human disease and

CC pain.

CC

Sequence 764 AA;

XX

AY06559

ID AY06559 standard; Protein; 764 AA.

XX

AC AY06559;

XX

DT 08-OCT-1999 (first entry)

XX

DE Human vanilloid receptor-related polypeptide 1 (VRERP-1).

XX

KW vanilloid receptor-related polypeptide 1; VRER-1; VR2;

XX

KW capsaicin receptor; VRI; human; vanilloid; analgesic; pain;

XX

KW inflammation; therapy; diagnosis.

XX

OS Homo sapiens.

XX

PN W09337675-A1.

XX

PD 29-JUL-1999.

XX

PR 22-JAN-1999; 99WO-US01418.

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XX

PI Brake AJ, Caterina M, Julius DJ;

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DR WPI: 1999-469113/39.

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N-PSDB; AAX87492.

XX

PT New isolated capsaicin receptor polypeptide and related nucleic acid

PT - useful for detecting vanilloid compounds, identifying modulators,

PT and in diagnosis or treatment of e.g. pain and inflammation

XX

Claim 4; Page 30-32; 47pp; English.

XX

PS

Claim 4; Page 30-32; 47pp; English.

XX

CC

Sequence 764 AA;

XX

Query Match 100.0%; Score 4004; DB 20; Length 764;

Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

Matches 764; Conservative 0;

XX

Db

1

MTPSSSPVFRLETLDDGGEDGSEADRKGKLDFFGLPMPMESQFOGEDDRKFAPQIRVNLY 60

|||||||

1

mtpssspvfrlelqqgqdgsgedeadrgkldfsgqlppmesqfqgedrkfapqirvnly 60

|||||||

QY

61

RKGIGASQDPNRDRFLNAVSRGVPEDLAGIPEYLSKTSKYLTDSEYTGSTGKTC 120

|||||||

1

mtpssspvfrlelqqgqdgsgedeadrgkldfsgqlppmesqfqgedrkfapqirvnly 60

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QY

61

RKGIGASQDPNRDRFLNAVSRGVPEDLAGIPEYLSKTSKYLTDSEYTGSTGKTC

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FT	Modified-site	/note= "tyrosine kinase phosphorylation site" 368..375
FT	Domain	/label= transmembrane_domain 431..448
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FT	Modified-site	/label= transmembrane_domain 499..502 /note= "cGMP-dependent protein kinase phosphorylation site"
FT	Domain	/label= transmembrane_domain 538..556
FT	Modified-site	/label= transmembrane_domain 604..607 /note= "N-glycosylation site"
FT	Domain	/label= transmembrane_domain 621..645
FT	Modified-site	/label= transmembrane_domain 622..628
FT	Modified-site	/note= "tyrosine kinase phosphorylation site" 749..752
FT	Modified-site	/note= "N-glycosylation site" 765..770
FT	Modified-site	/note= "myristoylation site"
PN	WO20029577-A1.	
XX	25-MAY-2000.	
XX	12-NOV-1999;	99W0-US26701.
XX	13-NOV-1998;	99US-0108322.
PR	28-DEC-1998;	98US-0114078.
PR	26-FEB-1999;	99US-0258633.
PR	19-OCT-1999;	99US-0421134.
XX	(MILL-) MILLENNIUM PHARM INC.	
XX	PT Curtis RAJ;	
XX	DR WPI; 2000-387790/33.	
XX	DR N-PSDB; AAA30254.	
XX	PT New capsaicin/vanilloid receptor polynucleotides and polypeptides, used to modulate pain signalling mechanisms	
DE	XX	
XX	PS Claim 11; Fig 2; 183pp; English.	
CC	CC	The present sequence is the protein sequence for human capsaicin/vanilloid receptor VR-2, which is involved in pain signalling. The coding sequence was isolated by searching a heart cDNA library for genes encoding novel receptors of the capsaicin/vanilloid family, and has been shown to be located at chromosome 17p11-12. This region has been associated with myasthenia gravis, Smith-Magenis syndrome, CORD5, cone rod dystrophy, choroidal dystrophy, central areolar and retinal cone dystrophy, and it is possible that the protein may be used to treat or diagnose these disorders. In addition, the gene, protein and its antibodies can be used to diagnose and treat hyperalgesia, inflammation, infection, ischaemia, joint pain, tooth pain, headaches, pain associated with surgery or neuropathic pain, possibly via the use of gene therapy.
CC	XX	
FT	Sequence	764 AA:
FT	Query Match	100.0%; Score 4004; DB 21; Length 764;
FT	Best Local Similarity	100.0%; Pred. No. 0;
FT	Matches	0; Mismatches 0; Indels 0; Caps 0;
FT	Domain	
FT	Modified-site	/note= "N-glycosylation site" 192..195
FT	Modified-site	/note= "N-glycosylation site" 208..243
FT	Domain	/label= ankyrin_repeat_domain 293..328

QY 1 MTSSSSPVFRLIEDLGGCGEDGSEBDRGKLDFFGSGLPPMESQFGEDRKFAPQIRVNLY 60
 ||||||| 61 RKGIGASQDPNRFDRDRUNAVSFGVPEDLAGLEYLSKTSKILDESYTEGSTKTCI 120
 ||||||| Db 61 rkgtgasqdpnrfdrdrfnavsgvpedlaglpeylsktskildseytegstgkcl 120
 ||||||| QY 121 MKAVNLKOGVACPLIQLQIDRSGNPOPLVNAQCTDDYRGHSALHAIERKLRSQCVK 180
 ||||||| Db 121 mkavnlkdgnacyacpliqlqidrsgnpoqlvnaqctddayyrghsalhiaekeksrqcvk 180
 ||||||| 181 LLVENGANTHARACGRFFGKQGCFYCFYCFELPLSLACTKQWDVSYLLENPHOPASIQA 240
 ||||||| 181 llvenganharacgrffgkqgcfycfelplslactkqwdvsvylenphopasiqa 240
 ||||||| Db 241 TDSCGNTVHALVMISDNSENALVTSMWDLQAGARLCPVTOLEDRNLQDTPKL 300
 ||||||| 241 tdsqntvhalmvisdnasenialvtsmwqdlqagarcicptvqledirnlqdtpkl 300
 ||||||| Db 301 AAKECKIEFRHIQOREFSGLHSRKFTEWYCYPVRSYLYDASVDSEENSENLEIAF 360
 ||||||| 301 aakeckiefrhiqorefsglhsrkftewcypvrslydiasvdseensenilaf 360
 ||||||| 361 HCKSPHRHRMVLNPKLQAKDMLIKPFELFLCNLYMFITAVYHOPTIKOAA 420
 ||||||| 361 hcksphrhrmvlnpkliqakwdmlipfelfcnlymfittavayhoptikkaa 420
 ||||||| Db 421 PHLKAEVGNSMLLTGHILLLGYYLWQOLWYWRRAHETWISFIDSFEILLEFLFOALL 480
 ||||||| 421 phlkaevgnsmltghilllggylwgqqlwytwrrhfwifisfidsfeilleflfoall 480
 ||||||| Db 481 TWSQVLCLAIEWMLPLVSALVYGLWNLNLYYTRGFQHMGIVYSMIQKVILRDRLRELL 540
 ||||||| 481 twsqvclafiaeiyplvsalvqwgwlnlyytrgfqhtgivysmikvildrlrfl 540
 ||||||| QY 541 IYLFLEFGFVALVLSQEWAPPEPTGNATESVQPMGQEDEGNGAQYRGILEASIEL 600
 ||||||| 541 iylfifgfavalvlsqewapptgnatesvqpmegedengaqyrgileasiel 600
 ||||||| Db 601 FKFTIGMELAFQEQBLHFRGMWLLAVLTVILLNLALMSETNSVATDSWIW 660
 ||||||| 601 fkftigmelafqeqblhfrgmwllavltvillnlalmsetnsvatdswiw 660
 ||||||| Db 661 KLOKAISVIEMENGWWCRKKQRAGVMLTVTKPQGSPDRWCRRVEENWASWQTLPT 720
 ||||||| 661 klokaisviemengwwcrkkqragsmltvktkpqspdwrcrvnevnwaswqtlpt 720
 ||||||| Db 721 LCEDDSGAGPRTIENPVIAASPRDEDEDASEENVVPVQQLSN 764
 ||||||| 721 lceddsagprtienpviasppkededgaseenqvvpqlsn 764
 ||||||| Db 721 lceddsagprtienpviasppkededgaseenqvvpqlsn 764
 RESULT 4
 AAB35622 ID AAB35622 standard; Protein; 764 AA.
 AC AAB35622;
 DT 14-FEB-2001 (first entry)
 DE Human vanilloid receptor like receptor protein.
 DE Human vanilloid receptor like receptor protein.
 KW VRL; vanilloid receptor-like receptor; pain; infection; allergy;
 KW mechanical injury; lymphoid tissue; human.
 OS Homo sapiens.
 OS Homo sapiens.
 XX GB2346882-A.
 XX PD 23-AUG-2000.
 XX PF 02-DEC-1999; 99GB-0028566.

XX 08-DEC-1998; 98GB-0027016.
 PR XX
 PA (MERI) MERCK SHARP & DOHME LTD.
 XX PI Bonpert, TP;
 XX DR WPI; 2001-064250/08.
 XX N-PSDB; AAC60297.
 PT New polynucleotide encoding human vanilloid receptor-like receptor for diagnosing and treating pain, infections, allergies, and cancers.
 XX PS Claim 1; Fig 1; 36pp; English.
 XX CCC
 The present invention relates to the human vanilloid receptor-like receptor. This receptor may be used for diagnosing or treating conditions associated with altered vanilloid receptor-like (VRL) receptor expression. It may also be used to treat abnormal conditions associated with pain. Conditions or diseases that can be diagnosed or treated include viral, bacterial and fungal infections, allergic responses, mechanical injury associated with trauma, hereditary diseases, lymphoma or carcinoma, or other conditions which activate the genes of the lymphoid tissues.
 XX CCC
 Sequence 764 AA:
 Query Match 100.0%; Score 4004; DB 22; Length 764;
 Best Local Similarity 100.0%; Pred. NO. 0; Mismatches 0; Indels 0; Gaps 0;
 Matches 764; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Matches 764; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MTSSSSPVFRLIEDLGGCGEDGSEBDRGKLDFFGSGLPPMESQFGEDRKFAPQIRVNLY 60
 ||||||| Db 1 mtsssspvfrelldggqedseadrgkldffgsglppmesqfgedkfafqirvnly 60
 ||||||| QY 61 RKGIGASQDPNRFDRDRUNAVSFGVPEDLAGLEYLSKTSKILDESYTEGSTKTCI 120
 ||||||| Db 61 rkgtgasqdpnrfdrdrfnavsgvpedlaglpeylsktskildseytegstgkcl 120
 ||||||| QY 121 MKAVNLKOGVACPLIQLQIDRSGNPOPLVNAQCTDDYRGHSALHAIERKLRSQCVK 180
 ||||||| Db 121 mkavnlkdgnacyacpliqlqidrsgnpoqlvnaqctddayyrghsalhiaekeksrqcvk 180
 ||||||| 181 LLVENGANTHARACGRFFGKQGCFYCFYCFELPLSLACTKQWDVSYLLENPHOPASIQA 240
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 ||||||| QY 301 AAKECKIEFRHIQOREFSGLHSRKFTEWYCYPVRSYLYDASVDSEENSENLEIAF 360
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 ||||||| 361 HCKSPHRHRMVLNPKLQAKDMLIKPFELFLCNLYMIFTAVYHOPTIKOAA 420
 ||||||| Db 361 hcksphrhrmvlnpkliqakwdmlipfelfcnlymfittavayhoptikkaa 420
 ||||||| QY 421 PHLKAEVGNSMLLTGHILLLGYYLWQOLWYWRRAHETWISFIDSFEILLEFLFOALL 480
 ||||||| Db 421 phlkaevgnsmltghilllggylwgqqlwytwrrhfwifisfidsfeilleflfoall 480
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 ||||||| QY 541 IYLFLEFGFVALVLSQEWAPPEPTGNATESVQPMGQEDEGNGAQYRGILEASIEL 600
 ||||||| Db 541 iylfifgfavalvlsqewapptgnatesvqpmegedengaqyrgileasiel 600
 ||||||| QY 601 FKFTIGMELAFQEQBLHFRGMWLLAVLTVILLNLALMSETNSVATDSWIW 660
 ||||||| Db 601 fkftigmelafqeqblhfrgmwllavltvillnlalmsetnsvatdswiw 660

CC effect of endogenous neurotransmitters and hormones, and to inhibit graft
 CC rejection by promoting immunosuppression. Nucleotide sequences encoding
 CC hVRCC are also useful for chromosome localisation.
 XX Sequence 763 AA;

QY 721 LCEDPSGAGVPTLNPIVLAASPKEDEDGASEENYVPVOLQSN 764
 Db 661 klpkaisvlmenywwcrkkqrqgymtvgtkpqsgpdkewrcvveenwasqqlpt 720
 Db 661 klpkaisvlmenywwcrkkqrqgymtvgtkpqsgpdkewrcvveenwasqqlpt 720

RESULT 5
 AAY42308 Best Local Similarity 99.6%; Score 3988.5; DB 20; Length 763;
 ID AAY42308 standard; Protein: 763 AA.
 XX Matches 763; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 AC AAY42308;
 XX DT 06-DEC-1999 (first entry)
 DE Human vanilloid receptor-like cation channel (hVRCC).
 XX KW Vanilloid; capsaicin; neuron; selective; calcium; cation; receptor; pain; inflammation; brain disease; cancer; autoimmune disorder.
 OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Misc-difference 5 /note= "Optionally there is an insertion of a Gln residue
 FT Misc-difference 417 .418 /note= "Optionally there is an insertion of a Gln residue
 FT in an allelic variant"
 XX PN W09946377-A2.

XX PD 16-SEP-1999.
 XX PF 10-MAR-1999; 99WO-EP01550.
 XX PR 11-MAR-1998; 98EP-0400565.
 XX PA (SNI) SANOFI-SYNTHELABO.
 XX PT Partiseti M; Renard S;
 XX DR WPI: 1999-571722/48.
 DR N-PDB: ARZ42208.

XX PT New receptor-like channel polypeptide and polynucleotide useful for prevention and treatment of cancer, autoimmune disease, brain disease and ulcers
 XX PS Claim 12; Page 15; 50PP; English.

XX This sequence represents a human vanilloid receptor-like cation channel (hVRCC). This channel is activated by vanilloids such as capsaicin and resiniferatoxin, and is expressed in a variety of tissues, particularly in nervous tissue such as the amygdala, substantia nigra, thalamus, dorsal root ganglia and spinal cord. Vanilloids are natural compounds which are known to trigger cation permeability in the peripheral neurons involved in transmission of noxious stimuli (e.g., vanilloid-gated cation channel, which is highly expressed in dorsal root ganglia, has six putative transmembrane domains, giving it significant structural homology with "store-operated" calcium channels, and is highly selective for calcium ions. hVRCC and nucleotides encoding it can be used in prevention, diagnosis or therapy of disorders that may be associated with an excess or deficiency of hVRCC. Disorders detected or treated using hVRCC proteins, nucleotides or antagonists include chronic inflammation, acute and chronic pain, brain diseases, abnormal proliferation and cancer, ulcers, autoimmune diseases, control of viscera innervated by the dorsal root ganglia neurons, to mimic or antagonise

CC Query Match 1 MTSDPSSSPVRLTETDGGQENGSEADRGKUDFGSLUPPMESQFOCEDRFAPOIRNLN 50
 CC Best Local Similarity 99.6%; Pred. No. 0; Indels 1; Gaps 1;
 CC Matches 763; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 CC Sequence 763 AA;

QY 121 MKAVINLKDGVNACILPLQIDRSQNPQBLVNAQCTDDYRGHSALHTAEKRSIQCVR 180
 Db 121 RKGIGASQPDPNRFDRLFNAVSCKVPELKSITSKYLTDSEYEGSTGKTL 120
 Db 61 rkgigasqpdpnrfdrltinaavsgpedqylpeyisltkskyldseyegtkcl 120

QY 181 LVENGANVIRACACRFQKOGTCFYGFLPLSIACTKWDVSYLLENPHOPASIA 240
 Db 181 Lvenganviracgrffqkqgtcfygfplslaactkwdqvsvylenphopasia 240

QY 241 TDSQENTVYLHALVMSDNSENIALNTSMQDCLOQARICPTVOLEDIRNLQDTPKL 300
 Db 241 tdsqentvylhalvmsdnseniaalntsmqdcloqaricptvoledirnlqdtpkl 300

QY 301 PAKEGKIEFRHILQREFSGHSLSRKFTEWYCGRVRSYLDASVDSCEENSVELIAF 360
 Db 301 aakegkiefrhilqrefsghslsrkftewycgrvrsyldasvdsceensveliaf 360

QY 361 HCKSKPHRRMVYLEPLNKLIQAKWMLLIPFLPFNLTCNLIMMFIFTAVAHQPTLKQAA 420
 Db 361 hckspkrhrmvyleplnkliqakwmllipflpfnlcnimfiftavahqptlk-aa 419

QY 421 PHLKAEVGNSMULRGHTLIGGIGYLQGLWYFWRHRVHTWISITDSPEELFLQALL 480
 Db 421 phlkaevgnsmulrghtliggigylqglwyfwrhrvhtwisisitdspeelflqall 480

QY 420 phlkaevgnsmulrghtliggigylqglwyfwrhrvhtwisisitdspeelflqall 479

QY 481 TWSQVLCFIALEWWLPLVLSALVIGWLNLITYTRGFOHTGYSMIQRLIDRLURFL 540
 Db 480 tvvsvqlcfiaeewlplvlsalvlgwlnllytrgfohtgyismiqrlidrlfl 539

QY 541 IYLVLFGEVALVLSUOEWRPEATPTGPWATESTOPMBEQEDSGNGAOYRGIBASLEL 600
 Db 540 iylvlfgevalvlsuoewrpeatptgpwatestopmbeqedsgngaoyr gibasel 599

QY 601 FKFTGMGELAQEQLHFRGMWLLLAVLUTYLILLNMLALMSETNSVADSWSIW 660
 Db 600 fkftgmgeleaqeqlhfrgmwlllavlutylillnmlalmsetnsvadswsiw 659

QY 661 KLOKAISVLEMENYWWCRKKQRAGVMLTVGKPGSPDRWCFCRVEEVWASQQLPT 720
 Db 660 klpkaisvlmenywwcrkkqrqgymtvgtkpqsgpdkewrcvveenwasqqlpt 719

QY 721 LCEDPSGAGVPTLNPIVLAASPKEDEDGASEENYVPVOLQSN 764
 Db 720 lcledpsgagvptlnpiivlaaspkedgedgaseenypvqlqsn 763

DE RESULT 6
 DE AAY2471 Best Local Similarity 99.6%; Score 3988.5; DB 20; Length 763;
 DE ID AAY2471 standard; Protein: 763 AA.
 DE XX
 DE AC AAY2471;
 DE XX
 DE 08-OCT-1999 (first entry)
 DE DT
 DE XX Human vanilloid receptor homologue VANLREP2 polymorphic variant PVP-1.

XX
 KW Human; vanilloid receptor homologue; VANIREP2; polymorphic variant;
 KW PVP-1; therapy; diagnosis; chronic pain; neuropathic; postoperative;
 KW rheumatoid arthritis; neuralgia; algesia; nerve injury; ischaemia;
 KW neurodegeneration; stroke; incontinence; inflammatory disorder.
 OS Homo sapiens.
 XX WO9937765-A1.
 PD 29-JUL-1999.
 XX PF 25-JAN-1999; 99WO-EP00420.
 PR 20-JAN-1999; 99GB-0001209.
 PR 27-JAN-1998; 98EP-0300549.
 PR 26-OCT-1998; 98GB-0023421.
 XX PA (SMIK) SMITHKLINE BEECHAM PLC.
 PI Davis JB, Duckworth DM, Hayes PD;
 XX DR WPI; 1999-479049/40.
 PT N-PSDB; ARI207116.
 XX PT New human vanilloid receptor homologues (VANIREP2)
 PS Claim 4; Page 35-37, 47pp; English.
 XX CC The present sequence represents a human vanilloid receptor homologue.
 CC VANIREP2 polymorphic variant PVP-1. VANIREP2 can be used to diagnose
 CC disease or susceptibility to disease related to expression or activity of
 CC VANIREP2 polypeptides. VANIREP2 may be used to treat diseases
 CC including pain, (for example chronic, neuropathic, postoperative,
 CC rheumatoid arthritic), neuralgia, algesia, nerve injury, ischaemia,
 CC neurodegeneration, stroke, incontinence, and inflammatory disorders.
 XX SQ Sequence 763 AA;

Query Match 99.6%; Score 3988.5; DB 20; Length 763;
 Best Local Similarity 99.9%; Pred. No. 0; Mismatches 0; Indels 1; Gaps 1;
 Matches 763; Conservative 0; Pairs 0; Homologous 0; Insertions 0; Deletions 0;
 OY 1 MTSPSSPVVRLETDGGQEDGSEADRKGKDFGSSLPPMESQFGEDRKTAPOTRVNLN 60
 Db 1 mtspsspvvrlletdggqedgseadrkgkdfgsslppmesqfgedrktaopqrnly 60
 OY 61 RKGTSASOPDENRDRDLNAVASRGVPEADAGLAEYLBSKSYLTDESETEGSGKTC 120
 Db 61 rkgtasopdenrdrdlnavasrgvpeadaglyeylsksytldseytegsgktc 120
 OY 121 MKAVINLKDGYNACTPLQLIDRSQGNPQLNPVNACTDDYRGHSAHLHATEKSILCVK 180
 Db 121 mkaivinlkdgynactplqlidrsqgnpqlnvactddyyrghsahlhateksilcvk 180
 OY 181 LLVEANGANVHARACCRPFQKGCGTFCYFGLPLSLACTKQWDVVSILENPHOPASLQA 240
 Db 181 llveanganharcrrpfqkgcgfcyfglplslaactqwdvvsylenphopaslqa 240
 OY 241 TDSSQMTVLALVMDSNSENTIAVTSMWDLQAGARICLPTVQLEDTRNLODITPLKL 300
 Db 241 tdsqmtvlalvmdnsnsentiatwsmwdlqagariclptvqledtrnloditplkl 300
 OY 301 AAKEKSKIEERHILQREFSGLSHRSKEFWCYGVRVSLYPLASVDSEENSVELIAP 360
 Db 301 aakeekskieerhilqrefsglshrskefwcygvrvsllyplasvdseensveliap 360
 OY 361 HCKSPHRHRMVLERPLNKLIQAKWDLIPKFMLCNLYTMFIFTAVAYHOPTRKQAA 420
 Db 361 hcksphrhrmvleplnkliqakwdlipkfmlcnlytmfiftavyhqptkk-aa 419
 OY 421 PHLKAEVGNSMLLGHILILGGIYLLVGOLWYFWRRHVFWISFIDSYEILEFLFQALL 480

RESULT 7
 AAY84834
 ID AAY84834 standard; Protein; 764 AA.
 XX AC AAY84834;
 XX DT 08-AUG-2000. (first entry)
 XX DE Amino acid sequence of a vanilloid receptor-like (VR-L) protein.
 XX KW Cation channel protein; vanilloid receptor-like 1 protein; VR-L;
 KW noxious heat; pain; inflammation; tissue damage; nociception;
 KW gene therapy; sensory neuron; immune system; analgesic;
 KW neuromodulatory.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 FT Misc-difference 149
 FT /note= "Gly encoded by CAG"
 FT Region 162..193
 FT /note= "ankyrin-like repeat"
 FT Misc-difference 200
 FT /note= "Lys encoded by ATT"
 FT Region 208..240
 FT /note= "ankyrin-like repeat"
 FT Region 293..323
 FT /note= "ankyrin-like repeat"
 FT Domain 391..410
 FT /note= "transmembrane domain 1"
 FT Domain 438..453
 FT /note= "transmembrane domain 2"
 FT Domain 468..489
 FT /note= "transmembrane domain 3"
 FT Domain 501..527
 FT /note= "transmembrane domain 4"
 FT Domain 535..554
 FT /note= "transmembrane domain 5"
 FT Misc-difference 560
 FT /note= "Thr encoded by GCT"
 FT Region 587..608
 FT /note= "possible pore loop"
 FT Domain 619..645
 FT /note= "transmembrane domain 6"
 FT Misc-difference 667
 FT /note= "unspecified amino acid encoded by TNT"
 XX PN WO2000022121-A2.

PD 20-APR-2000.
 XX
 PF 08-OCT-1999; 99WO-GB03348.
 XX
 PR 09-OCT-1998; 98GB-0022124.
 XX
 PA (UNIO) UNIV COLLEGE LONDON.
 XX
 PI Garcia R, Wood JN, England S;
 XX
 DR WPI; 2000-317978/27.
 N-PSDB; AAA14874.
 XX
 PT Novel non-selective cation channel protein and nucleotides useful as screening agents and in gene therapy of disorders associated with sensory neurons and leucocytes such as pain, autoimmune disorders and leukemia.
 PT
 XX
 PS Claim 2; Fig 3A; 55pp; English.
 XX
 CC The present sequence represents a non-selective cation channel protein, designated vanilloid receptor-like 1 (VR-L). The protein is obtained from human T lymphocytes. The VR-L protein is activated by noxious heat, and is likely to play a role in mediating the pain and inflammation accompanying tissue damage (nociception). The VR-L polynucleotide is useful for influencing the electrophysiological and/or pharmacological properties of a cell, and is also useful in the gene therapy treatment of disorders associated with sensory neurons and/or cells of the immune system and also for the preparation of a medicament for use in gene therapy. The VR-L polynucleotides and polypeptides are useful for identifying a substance with ion-channel modulating activity (such as analgesics), or compounds which affect nociception, immunomodulatory agents, neuromodulatory agents.
 CC
 XX
 Sequence 764 AA;

Query Match	98.4%	Score	3939;	DB	21;	Length	764;	RESULT	8
Best Local Similarity	98.0%	Pred.	0;					ID.	AY97364
Matches	749;	Conservative	6;	Mismatches	9;	Indels	0;	AA	AY97364 standard; Protein; 630 AA.
CC				CC				XX	
CC				Db				XX	
CC				QY				XX	
CC				1	MTPSSSPVFLRLTDGGEDGSDADRGKUDFGSGLPPMPEQSQFGEDRKFAPOIRRNLY	60	DE	Human VR-2 (alternate form) protein.	
CC				1	mtpssspvflrltdggsgedrkgldfgsglpomesqfqgedrkfasqirvnly	60	XX		
CC				QY	61	RKGCGASQDPNRDRDRLENAYSGVNPEDLAGIPEYLSKTSKVLIDSEYTESGSTGKTL	120	VW-2; human; vanilloid receptor; nociceptor; Pain signalling; hyperalgesia; musculoskeletal disorder; neuropathic pain; chromosome 17p11-12; gene therapy.	
CC				Db	61	rkgqgasqdpnrfdrdrlnfvnsrgvpedlagipeyksytsteyteystgkcl	120	XX	
CC				QY	121	MKAVINLKDGVNACILPILQIDROSGNPOPLVNAQCTDODYRGRHSALTAIERSLQCVK	180	XX	
CC				Db	121	mkavnlkdqvnacilpilqidrsqnpqlvnaqctdyrygrhsalniaekrslqcvk	180	PA (MILL-) MILLENNIUM PHARM INC.	
CC				QY	181	LLVNGANGNYHARACGRGFQKGQGCFYGEPLPLAATCIMKOWVVSYLNENPHOPASQA	240	XX	
CC				Db	181	llvenganyharacgrfikqggctcfygeplplslactkqwadvsvylenphopasqa	240	PI Curtis RAJ;	
CC				QY	241	TBSCGNTVHALMISDNAENTALVTSMDGLQAGARLCPVQLEDTRNLQDTPKL	300	XX	
CC				Db	241	tdsqgntvhalymsidsaenialvtmsydgllqaggrcpltvqledirnlqdltplkl	300	DR WPI; 2000-387790/33.	
CC				QY	301	AAXEGKIEFRHLIQREFSGLSHLSRKETEWCGYPVRVSLYDIASVSCNEENVLTEIAF	360	XX	
CC				Db	301	aakegkiefhrhlqrefsglshlsrketcwcygprvrslydiasdceensvleiaf	360	N-PSDB; AAA30255.	
CC				QY	361	HCKSPHRHRVNLPEPLNKLQAKWDLQPLPKFENFLCNUMLYMTTAYHPTKQAA	420		
CC				Db	361	hcksphrhrmvvlpeplnklqakwdllpkfnnflcmlymttavyahptkkqaa	420		
CC				QY	. 421	PHKAEVGNSMLITGHLITLGGLYLVQOLWFWRRHVFIMSFIDSYEFLFQALL	480		
CC				Db	421	phikaevgnsmlltghillsgiyllvgqlwyfwrhlfliwiisytdsyfeiflfhsll	480		

The present sequence is the protein sequence for an alternate form of human capsaicin/vanilloid receptor VR-2, which is involved in pain signalling. The coding sequence was isolated by searching a heart cDNA library for genes encoding novel receptors of the capsaicin/vanilloid family, and has been shown to be located at chromosome 17p11-12. This region has been associated with myasthenia gravis, Smith-Magenis Syndrome, CORD5, Cone-rod dystrophy, choroidal dystrophy, central areolar and retinal cone dystrophy, and it is possible that the protein may be used to treat or diagnose these disorders. In addition, the gene, protein and its antibodies can be used to diagnose and treat hyperalgesia, inflammation, infection, ischaemia, joint pain, tooth pain, headaches, pain associated with surgery or neuropathic pain,

CC possibly via the use of gene therapy.
 XX
 SQ Sequence 630 AA;

KW capsaisin receptor; VR1; rat; vanilloid; analgesic; pain;
 KW inflammation; therapy; diagnosis.
 OS Rattus rattus.

Query Match	81.4%	Score	3258	DB	21;	Length	630;	
Best Local Similarity	82.5%	Pred.	No.	2e-301;	Mismatches	0;	Indels	134;
Matches	630;	Conservative					Gaps	1;
Db	1	mtspssspvyletldggqdsgedrkguidfsgslppmesofoedrkfaqrivnly	60					
Db	1	mtspssspvyletldggqdsgedrkguidfsgslppmesofoedrkfaqrivnly	60					
Qy	61	RKGTCASQPDPNRDRDRFLNAVRSGVPELAGIPEYLSTSKEITDSETEGSTGKICL	120					
Db	61	rkgtgasqpdpnrdrdrflnavrsgvpeLAGIPEYLSTSKEITDSETEGSTGKICL	120					
Qy	121	MKAVNLKDGVNACTIPLQLIDRSQNPOLVNACTDDYRGISALHATEKRSIQCVR	180					
Db	121	mkavnlkdgvnactiplqlidrsqnpolvnactddyrgisalhatekrsiqcvr	180					
Qy	181	LLVEGANVIAVARACGRFFEGOKGCRFVFGELPLSIACTKOWDVSYLLENPHOPASIQ	240					
Db	181	llveganvianvaracgrffegokgcrfvgelplisiactkowdvsvylenphopasiq	240					
Qy	241	TDSQNTVLHALVMISDNAENIALVTSMGDLIAGARLCPTVQLEDTRNLQDTPKL	300					
Db	241	tdsqntvlhalvmisdnenaenialvtsmgdliaqarlcptvqledtrnlqdtplk	300					
Qy	301	AAKEEKIEFRHIQREFSGLSHSRKFTEWCGYEVRSVLYDASVDSCSEENSVLEIAF	360					
Db	301	aaakekiefrhiqrefsglshsrkftewcgysprvsydiasdseensleiaf	360					
Qy	361	HCKSHHRHRAVYLENLKLUQAKNDLILRFLMLCNLYMFTTAVAYHOPTIKOA	420					
Db	361	hckshhrhrahavylenlkluqakndlilrflmlcnlymfttavayhoptikoa	420					
Qy	421	PHLKKEVGNSMLLTGHILIGTIVLGOLWYFWRRHYFIWTSFIDSFEILFLFOALL	480					
Db	421	phlkkevgnsmlltghiligtgivlglyfwrrhviwifidsfeilflfqall	480					
Qy	481	TWSYVLCFLAIEWWPLLYSALVIGLWNLYYYFGFQHFGIYSIMQVKILRDILRFLL	540					
Db	481	twsvylcflaiewwpllysalvlglyyyfgfqtgqiyqmik-----	529					
Qy	541	IYLVFLFGFVALVLSQEAWRPEAPTGPNATESVQPMEGOEDEGNGAQYRGILEASLEL	600					
Db	530	-----	529					
Qy	601	FKFTIGMELAFQEQHLFRGMWLLLLAVVLLTVILLNNMLIAALMSETVNSVATDSWSIW	660					
Db	530	-----	529					
Qy	661	KLQKAKISLEMENGGWCRKKQRAGVMLTVGKPGSPDPBRWCFFVEVNWASHQTLPT	720					
Db	530	--kaivlemenyywcrkkqragsmltvgtkpdsprwcfrveenwasqtlpt	586					
Qy	721	LCEDPSGAGVPRTEENPVLAASPKRDEDGASEEENVPVQQLQSN	764					
Db	587	lcedpsgagvprteenpvlaaspkrdegedaseenvpvqqlqn	630					
RESULT	9							
AY06556		standard; Protein: 761 AA.						
XX								
AC	AY06556;							
XX	08-OCT-1999	(first entry)						
DE	Rat vanilloid receptor-related polypeptide 1 (VRP-1).							
XX	Vanilloid receptor-related polypeptide 1; VRP-1; VR2;							

The present sequence represents rat vanilloid receptor-related polypeptide 1 (VRP-1 or VR2), as deduced from a cDNA clone (see CAC81478) isolated from a rat brain cDNA library. VRP-1 is an example of a capsaicin receptor-related polypeptide of the invention. It is not activated by capsaicin or heat, but may interact with the novel capsaicin receptor VR1 (see AAY06555). It shows 49% identity with rat VR1. The invention provides vanilloid receptor polypeptides and polynucleotides, including capsaicin receptor-related polypeptides and polynucleotides, as well as expression vectors, host cells and transgenic animals. It also provides a method of using such receptors to identify vanilloid compounds in natural products or to screen candidate compounds that modulate capsaicin receptor function for use as analgesics (vanilloid analogues, therapeutic antibodies, antisense oligonucleotides, capsaicin receptor-encoding polynucleotides for gene therapy), flavour-enhancing agents, etc. Capsaicin receptor-related polypeptides and specific antibodies can also be used for the diagnosis and treatment of human disease and pain.

Claim 4; Page 81-83; 120pp; English.

XX

The present sequence represents rat vanilloid receptor-related polypeptide 1 (VRP-1 or VR2), as deduced from a cDNA clone (see CAC81478) isolated from a rat brain cDNA library. VRP-1 is an example of a capsaicin receptor-related polypeptide of the invention. It is not activated by capsaicin or heat, but may interact with the novel capsaicin receptor VR1 (see AAY06555). It shows 49% identity with rat VR1. The invention provides vanilloid receptor polypeptides and polynucleotides, including capsaicin receptor-related polypeptides and polynucleotides, as well as expression vectors, host cells and transgenic animals. It also provides a method of using such receptors to identify vanilloid compounds in natural products or to screen candidate compounds that modulate capsaicin receptor function for use as analgesics (vanilloid analogues, therapeutic antibodies, antisense oligonucleotides, capsaicin receptor-encoding polynucleotides for gene therapy), flavour-enhancing agents, etc. Capsaicin receptor-related polypeptides and specific antibodies can also be used for the diagnosis and treatment of human disease and pain.

SO Sequence 761 AA;

Query Match 76.2% Score 3051.5 DB 20; Length 761;

Best Local Similarity 77.7%; Pred. No. 1.3e-281;

Matches 598; Conservative 62; Mismatches 93; Indels 17; Gaps 7;

Db 1

1 mtspssspvyletldggqdsgedrkguidfsgslppmesofoedrkfaqrivnly 60

Db 1 mtsasspparletsdsgdeagnaevnkgqke--pppinespfqredrrnspqkvlnf 56

Qy 61 --RKGTCASQPDPNRDRDRFLNAVRSGVPELAGIPEYLSTSKEITDSETEGST 115

Db 57 ikrpptntsaspsqqepdrdrflsrtvsvsqvpeeltgileylwskytldsaytgt 116

Qy 116 GKTCLMKAVNLKDGVNACTIPLQLIDRSQNPOLVNACTDDYRGISALHATEKRS 175

Db 117 qktclmkavnlkdgvnacimplqidksqnpkpvlnaqctdefyqghsahlaikrs 176

Qy 176 LQCVKILVENGANYHARAAGGRFFGKGCFCYFELPLSIACTKOWDVSYLLENPH 235

Db 236 ASLQATDSQNTVLHALVMISDNAENIALVTSMGDLIAGARLCPTVQLEDTRNLQD 295

Db 237 asleatdsigntvhalvmiadnspsnalsvihuydg1lqmgarlcptvqleelshnqgl 296

Qy 296 TPLKLAKEKIEFRHILOREFSG-LSHLSRKFTEWCGYGPVRLSYLDSLVDSCENS 354

|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 297 tptklaakegkieleirhilaqrefsgpyqplskrfewcgvprvlydissvdsweknsy 356
CC compound (an essential structural component of capsaicin) from natural
CC products by detecting an alteration of intracellular response associated
CC with capsaicin receptor activity, preferably an alteration of
CC intracellular calcium levels, and are useful for screening for compounds
CC for use in analgesics. Capsaicin receptor polypeptides and antibodies
CC are useful for diagnosis and treatment of human diseases and painful
CC syndromes. The transgenic mammals can be used to screen for capsaicin
CC receptor antagonists and agonist. Prior art methods for screening or
CC characterising new capsaicin receptor-binding compounds relied on assays
CC using sensory neurons in culture or in intact animals. The new
XX polypeptides provide a more sensitive screen.

Query Match 76.2%; Score 3051.5; DB 20; Length 761;
Best Local Similarity 77.7%; Pred. No. 1; 3e-281;
Matches 598; Conservative 62; Mismatches 93; Indels 17; Gaps 7;
QY 1 MTPSPSSSPVNRLETRDGGQDGSEADRKGKUDFGSCLPPMSQGEDRKEAQPQIRNLY 60
Db 1 mtsasssppairletsdgdeeqnagnaevnkqke---pppmespfpqredrussppqkvlnf 56
QY 655 DSWSIWKLKLAISVLEMENGYWWC-RKKRAGVM-TVGKRPDSPEDEKCFRVEEVNAS 713
Db 655 nswsiwklqkaisvlemengywcrkrkhregrlkgvgrdgtpdrderwcfrvevnwa 714
QY 714 WEQTLPTLCBPDSPGAGPYPRLENPLASPKEDEDGASESENYYVPPQLOQS 763
Db 715 wektiptisedpspgqitgnknpt---skpgknasedehiplqlvqs 760
Db 717 gktclmkavnlqdgynacimplqdksgnpkplvnsctdefyqghisahlaiakrs 176
QY 176 DQCVKULVENGANVIAARACGRFFRGOGRCFVFGFLPLSLACTKQWDVSYLHENPHQ 235
ID AAW9790 standard; Protein; 761 AA.
XX AAW9790:
DT 16-JUN-1999 (first entry)
XX
DE Rat VRRP-1 (VR2) capsaicin receptor.
XX
VR1: capsaicin receptor; VR2: VRRP-1; analgesic; diagnosis;
KW human disease; painful syndrome.
XX Rattus rattus.
OS XX
PN W0909140-A1.
XX PD 25-FEB-1999.
XX PF 20-AUG-1998; 98WO-US17466.
XX PR 22-JAN-1998; 98US-0072151.
PR 20-AUG-1997; 97US-0915461.
PA (REGC) UNIV CALIFORNIA.
PI Brake A, Caterina M, Julius DJ;
XX DR WPI; 1998-181023/15.
DR N-PSDB; AAX19730.
XX
PT New capsaicin receptor polypeptide - useful for screening or
characterising capsaicin receptor-binding compounds
XX
CS Claim 4; Page 78-79; 99pp; English.

|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 417 ldqpaipsskatfgesmllighilliggiylqwlwrrflfiwifmdsyfeill 476
QY 475 LFQALITVWSQVLCLAIEWYLPLVSALVIGWLNLYTTRGFTGTGYSMOKVILRD 534
Db 477 1lqalitvlsqvrlmetewyplivlisvlgwlnlytrgfhtgysvmiqkvild 536
QY 535 LLRFLLIYLVLFGLFGLAVALVLSQAWRBEAPTGPNTESVOPMEQEDGNGQYRGIL 594
Db 537 lrlfliyvlfglfavalvsisrskapedinstreptqvgqee--papysrl 594
QY 595 EASLULFKFTGMGMLAFQQLHFRGMVLLLAVVLLTILLNLALMSETVNSAT 654
Db 595 dasielfkftigmelafqeqrlgrgqvllaylvlliyvllmlialmsetvhad 654
QY 655 DSWSIWKLKLAISVLEMENGYWWC-RKKRAGVM-TVGKRPDSPEDEKCFRVEEVNAS 713
Db 655 nswsiwklqkaisvlemengywcrkrkhregrlkgvgrdgtpdrderwcfrvevnwa 714
QY 714 WEQTLPTLCBPDSPGAGPYPRLENPLASPKEDEDGASESENYYVPPQLOQS 763
Db 715 wektiptisedpspgqitgnknpt---skpgknasedehiplqlvqs 760

RESULT 10

Query Match 76.2%; Score 3051.5; DB 20; Length 761;
Best Local Similarity 77.7%; Pred. No. 1; 3e-281;
Matches 598; Conservative 62; Mismatches 93; Indels 17; Gaps 7;
QY 1 MTPSPSSSPVNRLETRDGGQDGSEADRKGKUDFGSCLPPMSQGEDRKEAQPQIRNLY 60
Db 1 mtsassspairletsdgdeeqnagnaevnkqke---pppmespfpqredrussppqkvlnf 56
QY 61 ---RKGTGA-SQDPDNRFDRDLNAVSRGVNPEDLAGIPEYLSTSKEUITLESEYEGST 115
Db 57 ikrpptntspsqqpefdartrdrfslvsqpeetlgileytwnskvldtsyegst 116
QY 116 GKTCLMKAVNLKDEVNACTIPLIQLIDROSGGNPQPLVNAQCTDDYYRGHSALHATEKRS 175
Db 117 gktclmkavnlqdgynacimplqdksgnpkplvnsctdefyqghisahlaiakrs 176
QY 176 DQCVKULVENGANVIAARACGRFFRGOGRCFVFGFLPLSLACTKQWDVSYLHENPHQ 235
Db 177 1qcvklivenqadvhlracgrfrqkqhgctyfgelpislaactkqwdvtytlenphq 236
QY 236 ASLQATDSQCNVTUHALVMSDNSSENIALTVSMGDLQAGARLCTPVOLEDRLNQLD 295
Db 237 asleatds1gnvtihalvmlndspnalspsnlaishnqgi 296
QY 296 TPLKLAKEEGKIEFRHIQREFSG-LSHLSRKTEWCYGPVRSVLDIASVDSCEENS 354
Db 297 tptklaakegkieleirhilaqrefsgpyqplskrfewcgvprvlydissvdsweknsy 356
QY 355 LEIATFHCKSPHRHRMVLEPLNKLUQAKMDLIPKFFNLFCNUYIMLIFTAYHQP 414
Db 357 leiafhckspnrhrmvleplnkilqekwdrilvsrskapedinstreptqvgqee--papysrl 594
QY 415 LKKOAPHKAEVENSMLLQHGHLTLLGGYLQWLWRRFLFVWISFDSYFEILF 474
Db 417 ldqpaipsskatfgesmllighilliggiylqwlwrrflfiwifmdsyfeill 476
QY 475 LFQALITVWSQVLCLAIEWYLPLVSALVIGWLNLYTTRGFTGTGYSMOKVILRD 534
Db 477 1lqalitvlsqvrlmetewyplivlisvlgwlnlytrgfhtgysvmiqkvild 536
QY 535 LLRFLLIYLVLFGLFGLAVALVLSQAWRBEAPTGPNTESVOPMEQEDGNGQYRGIL 594
Db 537 lrlfliyvlfglfavalvsisrskapedinstreptqvgqee--papysrl 594
QY 595 EASLULFKFTGMGMLAFQQLHFRGMVLLLAVVLLTILLNLALMSETVNSAT 654
Db 595 dasielfkftigmelafqeqrlgrgqvllaylvlliyvllmlialmsetvhad 654
QY 655 DSWSIWKLKLAISVLEMENGYWWC-RKKRAGVM-TVGKRPDSPEDEKCFRVEEVNAS 713
Db 655 nswsiwklqkaisvlemengywcrkrkhregrlkgvgrdgtpdrderwcfrvevnwa 714
QY 714 WEQTLPTLCBPDSPGAGPYPRLENPLASPKEDEDGASESENYYVPPQLOQS 763
Db 715 wektiptisedpspgqitgnknpt---skpgknasedehiplqlvqs 760

Sequence 761 AA;

RESULT 11
 AAY06560
 ID AAY06560 standard; protein: 727 AA.
 XX
 AC AAY06560;
 XX
 DT 08-OCT-1999 (first entry)
 DE Human vanilloid receptor-related polypeptide 1 (VRP-1).
 KW Vanilloid receptor-related polypeptide 1; VRP-1; VR2;
 KW capsaicin receptor; VRI; human; vanilloid; analgesic; pain;
 KW inflammation; therapy; diagnosis.
 OS Homo sapiens.
 XX
 FH Location/Qualifiers
 FT Misc-difference 194..208
 PT /note= "unidentified residues"
 FT Misc-difference 308
 PT /note= "unidentified residue"
 FT Misc-difference 311
 PT /note= "unidentified residue"
 FT Misc-difference 343..368
 PT /note= "unidentified residues"
 FT Misc-difference 404
 PT /note= "unidentified residue"
 FT Misc-difference 460..474
 PT /note= "unidentified residues"
 FT Misc-difference 558
 PT /note= "unidentified residue"
 FT Misc-difference 608
 PT /note= "unidentified residue"
 PN WO937675-A1.
 XX
 PD 29-JUL-1999.
 XX
 PF 22-JAN-1999; 99WO-US01418.
 XX
 PR 22-JAN-1998; 98US-0072151.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Brake AJ, Caterina M, Julius DJ;
 XX
 DR WPI; 1999-469113/39.
 XX
 PT New isolated capsaicin receptor polypeptide and related nucleic acid
 PT - useful for detecting vanilloid compounds, identifying modulators,
 PT and in diagnosis or treatment of e.g. pain and inflammation
 PS Claim 4; Page 91-93; 120Pp; English.
 XX
 CC The present, claimed sequence represents a human vanilloid receptor-
 CC related polypeptide 1 (VRP-1 or VR2) sequence predicted from
 CC available ESTI sequences (see WO97499-501). VRP-1 (see also AAY06559)
 CC is an example of a capsaicin receptor-related Polypeptide of the
 invention. It is not activated by capsaicin or heat, but may
 interact with the novel capsaicin receptor VRI (see AAY06558). The
 invention provides capsaicin receptor and capsaicin receptor-
 related polypeptides and polynucleotides, as well as expression
 vectors, host cells and transgenic animals. It also provides a
 method of using such receptors to identify vanilloid compounds in
 natural products or to screen candidate compounds that modulate
 capsaicin receptor function for use as analgesics (vanilloid
 analogues, therapeutic antibiotics, antisense oligonucleotides,
 capsaicin receptor-encoding polyribonucleotides for gene therapy),
 flavour enhancing agents, etc. Capsaicin receptor-related
 polypeptides and specific antibodies can also be used for the
 diagnosis and treatment of human disease and pain.
 XX
 SQ Sequence 727 AA;

Query Match 75.8%; Score 3036.5; DB 20; Length 727;
 Best Local Similarity 79.1%; Pred. No. 3.1e-280;
 Matches 620; Conservative 5; Mismatches 82; Indels 77; Gaps 10;
 Matches 620; Conservative 5; Mismatches 82; Indels 77; Gaps 10;

OY 1 MTPSPSSPVVRLLETIDGGQEDGSEADRKGKDFGSGCLPPMESQFQEDRKFAPQIRVNLY 60
 Db 1 mtpsspvvrlletidggqedgseadrkgkdfqgipmesqfgedrktapqirvnly 60

OY 61 RKGIGASQPDPNRFDRLNAVASRGVPEDAGLPEYLSTSKEYLTDSEYEGSTGKTL 120
 Db 61 rkgtgasqpdpnrfdrlnavasrgvpedaglpeylstskeyldseytgstgkcl 120

OY 121 MKAVINLKDGVNACTILPLIQLIDDSGNPOPLVNAQCTDDYRGISALHATEKSLQCVK 180
 Db 121 mkaavinlkdgvnacilpliqdrdsqgnppqplvnadqctddyyrgisalhalekrlsqcvk 180

OY 181 LLVENGANYHARACGRFFQKGQTCFYGBPLLSAECTKQWDVSYLLENPHOPASLQA 240
 Db 181 llvenganyharaaxxxxxxxxxxxxxxxgelpslaactkqwdvsvylenphopasla 240

OY 241 FDSQNTVHLALVMTSNDSAENIALVTSMWDLQGARICPTQLEDIRNLQDITPLKL 300
 Db 241 tsdqsgntvhalaivmisdnsrenialvtstmydglqagaricptqledirnlqltpkl 300

OY 301 AKEEKTEIFRHTL-QRESGLS-HLSRKTE-WCYGPVRSVLYDASVSDCEENSVLE 356
 Db 301 aakeekixifxhllaskgsklkppfrkrtewwlmgpvrxxxxxxxxxxxxxxxxxxx 360

OY 357 1IAFHCKSPHRMVTPLINKLQAKWDLIPRFLNFCNLNYMFITAVALHQPTK 416
 Db 361 xxxxxxxxxpghrmlwpinklqakwdlkipflnlnxymfitavayhqptk 420

OY 417 KQAPHILKAEGVNSMLTGLTGLILIGGIYLVQWYFWR-----HVF 460
 Db 421 kqaaphilkaegvnsmltghllllggiylyvgqkfwxxxxxxxxxxxxfpgh-- 478

OY 461 IWIISFTDSYFBILFLFOALLTVVSVOLCFLAIEWLPLLVSLVIGWLNLYYTRGFQHT 520
 Db 479 -----rwpapacyca--gaglaepalytwl----pahrh 509

OY 521 GIYSMIQKVLRLDLRELFLYLFGLFAWALVLSQRARWRPAPGTNATEVQPMEG 580
 Db 510 qchd-----pealvlsqd-wrpeaptgmatatesvqpmeg 543

OY 581 QDEDEGNGAQYRGRILEASLELKFTIGMGEAFQEOHLFRQMLLILLAVLUTILLNM 640
 Db 544 qedegngaqyrgixaslelkftigmgelafqeqlhfgmwllllayllyillnm 603

OY 641 LIAMSETVNSVATDSWSWLRQLRATSVLEMENGYWAWCRKKRQACGMLTWGTKDGSPDE 700
 Db 604 liaxsetvnsvatdswsiwkqlkaisvlemeenywwcrrkqagmltgkdgspde 663

OY 701 RWCFEVVEEWNWASWOTLPICEPSGAGVPTLENPVIASPPKEDDASENENYVPL 760
 Db 664 rwcfrveevnwawseqiptcedpsgavptlenpviasppkeddaseenyvpl 723

OY 761 LQSN 764
 Db 724 lqsn 727

RESULT 12
 AAW99798
 ID AAW99798 standard; protein: 727 AA.
 XX
 AC AAW99798;
 XX
 DT 16-JUN-1999 (first entry)
 XX
 DE Human VRP-1 (VR2) capsacin receptor.

KW VR1; capsaicin receptor; VR2; VRRP-1; analgesic; diagnosis;
 KW human disease; painful syndrome.
 XX
 OS Homo sapiens.
 XX
 PN WO990914-A1.
 XX
 PD 25-FEB-1999.
 XX
 PR 20-AUG-1998; 98WO-US17466.
 XX
 PR 22-JAN-1998; 98US-0072151.
 XX
 PR 20-AUG-1997; 97US-0915461.
 XX
 PA (RESC) UNIV CALIFORNIA.
 XX
 PI Brake A, Caterina M, Julius DJ;
 XX
 DR WPI; 1999-181023/15.
 XX
 PT New capsaicin receptor polypeptide - useful for screening or
 characterising capsaicin receptor-binding compounds
 XX
 PS Claim 4; Page 86-88; 99pp; English.

The present sequence is an isolated capsaicin receptor polypeptide (I). Capsaicin polypeptides are useful for identifying binding compounds which affect cellular responses. Preferably this is for identifying a compound that binds (I) and affects a cellular response associated with capsaicin biological activity (e.g. intracellular calcium flux). The polypeptides and host cells are useful for detecting a vanilloid compound (an essential structural component of capsaicin) from natural products by detecting an alteration of intracellular response associated with capsaicin receptor activity, preferably an alteration of intracellular calcium levels, and are useful for screening for compounds for use in analgesics. Capsaicin receptor polypeptides and antibodies are useful for diagnosis and treatment of human diseases and painful syndromes. The transgenic mammals can be used to screen for capsaicin receptor antagonists and agonists. Prior art methods for screening or characterising new capsaicin receptor-binding compounds relied on assays using sensory neurons in culture or in intact animals. The new polypeptides provide a more sensitive screen.

XX Sequence 727 AA;

Query Match 75.8%; score 3036.5; DB 20; Length 727;
 Best Local Similarity 79.1%; Fred. No. 3.1e-280;
 Matches 620; Conservative 5; Mismatches 82; Indels 77; Gaps 10;

QY 1 MTSSSSSPVFLERIDGGOEDGSRADRGKUDFGGGLPPMESQFQGDRKFAPQIRVNLY 60
 Db 1 mtsssspvfleridggqdggeadrgkldfsgqlppmesqfqgedkfapqirvnly 60

QY 61 RKGIGGASQDPNRFDRDRFLNAVSRGVPEPLASLQKTSKLTDBTYESTGKCL 120
 Db 61 rkgtgqasqdpnrfdrdrflnaqvsgvpedagleylskskyldseytedstgkcl 120

QY 121 MKAVUNLKOGVNACTILPLQLIDROSGNPOPLWNAQTCDYRGHSALHAIERSLQCVK 180
 Db 121 mkaavnlkdgvnaclplqlqidrsqnpqlvnaqctdyyrghsalhiaeikrsqcvk 180

QY 181 LLVENGANWHARACGRFFQKGQGTCFYFCELPISLACTKQWDVVSYLLENPHQPAQIA 240
 Db 181 llvenganvharaaxxxxxxxxxxxxxxqelpislaactkqdwvsvylenphqasqa 240

QY 241 TDSSQNTVHALMSDMSAENTALVTSMYDGIIQAGARLCPTVOLEDIINQDTPKL 300
 Db 241 tdsqntvhalmsaenialvtmnydgiiqagarlcptvqledinqdtpkl 300

QY 301 AAKEGKIEF-RHLL-QRFSGLS-HLSRKFTB-WCYCPVRSVSLYDLASVDSEENSLV 356
 Db 301 aakegkixifxrhllasqksglkppfrkftewmngpvrvxxxxxxxxxxxxxx 360

RESULT 13
 AAY97359
 ID AAY97359 standard; Protein; 436 AA.
 XX
 AAY97359;
 AC
 XX
 DT 05-SEP-2000 (first entry)
 XX
 DE Human VR-2 (alternate form) partial protein.
 XX
 KW VR-2; human; vanilloid receptor; nociceptor; pain signalling;
 KW hyperalgesia; musculoskeletal disorder; neuropathic pain;
 KW chromosome 17p11-12; gene therapy.
 XX
 OS Homo sapiens.
 XX
 PN WO200029577-A1.
 XX
 PD 25-MAY-2000.
 XX
 PR 12-NOV-1999; 99WO-US26701.
 XX
 PR 13-NOV-1998; 98US-0108322.
 PR 28-DEC-1998; 98US-0114078.
 PR 26-FEB-1999; 99US-025663.
 PR 19-OCT-1999; 99US-0421134.
 XX
 PR (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Curtis RAJ;
 XX
 DR WPI; 2000-387790/33.
 DR N-PSDB; AAY97359.
 XX
 PT New capsaicin/vanilloid receptor polynucleotides and polypeptides, used
 PT to modulate pain signalling mechanisms
 XX
 PS Claim 11; Fig 3; 183pp; English.

The present sequence is the partial sequence for an alternate form of human capsaicin/vanilloid receptor VR-2, which is involved in pain signalling. The coding sequence was isolated by searching a heart cDNA library for genes encoding novel receptors of the capsaicin/vanilloid family, and has been shown to be located at chromosome 17p11-12. This region has been associated with myasthenia gravis, Smith-Magenis Syndrome, CORD5, Cone-rod dystrophy, choroidal dystrophy, central areolar and retinal cone dystrophy, and it is possible that the protein may be used to treat or diagnose these disorders. In addition, the gene, protein and its antibodies can be used to diagnose and treat hyperalgesia, inflammation, infection, ischaemia, joint pain, tooth pain, headaches, pain associated with surgery or neuropathic pain, possibly via the use of gene therapy.

Sequence 436 AA;

Query Match 55.9%; Score 2240; DB 21; Length 436;
Best Local Similarity 76.5%; Pred. No. 1.1e-204;
Matches 436; Conservative 0; Mismatches 0; Indels 134; Gaps 1;

Qy 195 GRFQKQGQNCYFVYELPLISLACTKQWVSYLENPHOPASLQATSGNTVHLVM 254

Db 1 grfIqkgqctfcygeplislaactkqwdvsvlylengpasiqatasgntvhlvm 60

Qy 255 ISDNSENIALTVTSMDGILQAGARLCPTVQLEDIRNLQDLPPLKAAKEGKTEIFRHIL 314

Db 61 isdnasenialtvtsmdgllqagarcplcpvqledirnlqdltplklaakegkiefrhil 120

Qy 315 QREFSGSLSHLSRKTEWCYGVPRVSSLVDIASVDSCEENSEVLEITAFHCKSPHRURMVLE 374

Db 121 qrefsgslshlsrktewcycgvprvslvdasvdsceensevleitafhckspfrhrmvle 180

Qy 375 PNLKILQAKWDLILPKFFFLNPLCNLIVMIFTAVAHOPTKKOAPHLKAEVGNMSMLT 434

Db 181 pntlklatdwlilpkffflnfcilimifltaayhoptkkqaaphnkaegnsmilt 240

Qy 435 GHILTLIGGIYLIVGQLQFWRRHFIWISFIDSYFELIFQALITYWSQVLCAFEW 494

Db 241 ghiliIlggiylivgqlwiyfrwrhfiwifdsyfeilifqalitvvsqvlafalew 300

Qy 495 YLPILVSLVGLWNLILYXTRGFHTGIVYSVMOVKVILRDLRLILYLVFLFGFALVY 554

Db 301 ylpilvslvglwnlilyxtrgfhtgjysvmiqk----- 335

Qy 555 SLSOEAWRPEAFTGPNAESVQPMEGQEDEGNGAQYRGILEASLELFKFTIGMELAFOE 614

Db 336 ----- 335

Qy 615 OLHFRGMVLLLLAYVLLTYILLNMLIAMSETVNSVATDSWSIWKLQAKISVLEMENG 674

Db 336 ----- 346

Qy 675 YWMCRKKRKORAGVMLTGTPKGSPPERMCFERVEEVNNASWEQTLPTCLEDPSAGVPRLT 734

Db 347 YWMCRKKRKQRAGVMLTGTPKGSPPERMCFERVEEVNNASWEQTLPTCLEDPSAGVPRLT 406

Qy 735 ENPVLASPKDEDEGASEENIVPQOLQSN 764

Db 407 enpvlaspkdedegaseenivpqlqsn 436

KW hyperalgesia; musculoskeletal disorder; neuropathic pain;
KW gene therapy.
XX
OS Rattus sp.
XX WO200029577-A1.
XX
PD 25-MAY-2000.
XX
FP 12-NOV-1999; 99W0-US26701.
XX PR 13-NOV-1998; 98US-010322.
PR 28-DEC-1998; 98US-0114078.
PR 26-FEB-1999; 99US-0238633.
PR 19-OCT-1999; 99US-0421134.
XX PA (MILL-) MILLENNIUM PHARM INC.
XX PI Curtis RAJ;
XX DR WPI: 2000-387790/33.
XX N-PSDB; AAA30256.
XX PS
PT New capsaicin/vanilloid receptor polynucleotides and polypeptides, used
to modulate pain signalling mechanisms -
XX
Claim 11; Fig 4; 183pp; English.

The present sequence is the protein sequence for the rat capsaicin/vanilloid receptor VR-2, which is involved in pain signalling. The coding sequence was isolated by searching a dorsal root ganglion library for genes encoding novel receptors of the capsaicin/vanilloid family. The human version of this gene is found at chromosome 17p11-12, a region which has been associated with myasthenia gravis, Smith-Magenis syndrome, CORD5, Cone-rod dystrophy, choroidal dystrophy, central areolar and retinal cone dystrophy, and it is possible that the human protein may be used to treat or diagnose these disorders. In addition, the human gene, protein and its antibodies can be used to diagnose and treat hyperalgesia, inflammation, infection, ischaemia, joint pain, tooth pain, headaches, pain associated with surgery or neuropathic pain, possibly via the use of gene therapy.

Sequence 554 AA:

Query Match 55.7%; Score 2230; DB 21; Length 554;
Best Local Similarity 79.0%; Pred. No. 1.4e-203;
Matches 437; Conservative 42; Mismatches 66; Indels 8; Gaps 4;

Qy 213 LSLAACTKQWDVSYLENPHOPASLQATSGNTVHLVMISDNSENIALTVTSMDG 272

Db 7 lslaactkqwdvsvlylengpasiqatasgntvhlvmadnspsenalvihmgd 66

Qy 273 LIQGARICLPTVQLEDIRNLQDLPPLKAAKEGKTEIFRHILREFSG-LHSLSRKFW 331

Db 67 l1qgariclptvqleeeishnqgtplklaakegkiefrhilrefsgpyqplsrktew 126

Qy 332 CYGVRSVSLYDASVDSCEENSEVLEITAFHCKSPHRURMVLEPLNKULQAKWDLIPK 391

Db 127 cygvrsvsllydassdwskvnsvleitafhckspfrhrmvleplnkulqekwdrvsrf 186

Qy 392 FLNFCNLNLYMFIFTAVAHOPTKKOAPHLKAEVGNMSMLT 451

Db 187 ffnfaciyvymifitvvayhqpsldqpaipskatfgesmlinghiiigiyilqg 246

Qy 452 WYFURRHFIWISDPSYFEILFOALITYWSQVCLAIENYPLIVSAYLVGLWNIL 511

Db 247 wyfurrhfiwismdsyfeilifqlqalitvsgvrlmetewyplivlgwlnl 306

Qy 512 YTTRGFOHTGIVYSVMIQKVILRDLRLFLILYLVFLFGAVAVLVSQDAWRPEAFTGPNA 571

Db 307 yttrgfohtgivysvmiqvirkdrflfvrlfylfgavavlvlsearspakedns 366

RESULT 14
AY97360 standard; Protein; 554 AA.
ID AAY97360 (first entry)
XX AC AAY97360;
XX DT 05-SEP-2000
DE Rat partial VR-2 protein.
XX VR-2; rat; vanilloid receptor; nociceptor; pain signalling;

Thu Oct 18 15:25:08 2001

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